

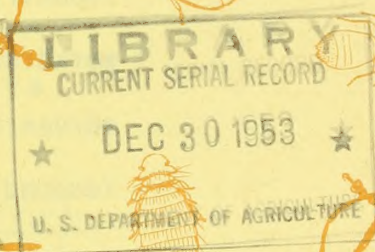
Historic, archived document

Do not assume content reflects current
scientific knowledge, policies, or practices.

767
2078
VOL. 3 No. 51

DECEMBER 18, 1953

Cooperative
**ECONOMIC INSECT
REPORT**



Issued by

**BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE**

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

DIVISION OF INSECT DETECTION AND IDENTIFICATION

SECTION OF ECONOMIC INSECT DETECTION AND REPORTING

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Bureau serves as a clearing house and does not assume responsibility for accuracy of the material.

Reports and inquiries pertaining to this release should be mailed to:

Section of Economic Insect Detection and Reporting
Bureau of Entomology and Plant Quarantine
Washington 25, D. C.

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

Distribution of MEADOW SPITTLEBUG in the United States.
(page 846).

Summary of trapping and scouting for EUROPEAN CHAFER - 1953.
(page 847).

Fall survey of APHID eggs in Maine. (page 848).

Summary of INSECT CONDITIONS -1953 in Arizona (page 851).
and Nevada (page 854).

Reports in this issue are for the week ending December 11 unless
otherwise designated.

WEATHER BUREAU'S 30-DAY OUTLOOK

*Mid-December 1953 to Mid-January 1954

The Weather Bureau's 30-day outlook for the period from mid-December 1953 to mid-January 1954 calls for temperatures to average above normal in the western third of the country and also in the Northeast and Lower Great Lakes. Below normal temperatures are indicated in the South and the Mid-West. In other areas temperatures are expected to average not far from seasonal normals.

Precipitation in excess of normal is anticipated over and east of the Appalachians and along the Gulf Coast. Subnormal amounts are

expected west of the Continental Divide and in the Middle Mississippi Valley, with near normal elsewhere.

*This report released by the Weather Bureau on December 15, 1953.

Weather forecast given here is based on the official 30 day "Resume and outlook," published twice a month by the Weather Bureau. You can subscribe through Superintendent of Documents, Washington, D. C. Price: \$4.80 a year, \$2.40 for six months.

WEATHER FOR THE WEEK ENDING DECEMBER 15, 1953

Frequent precipitation from the Ohio Valley to the Atlantic Coast during the past week maintained adequate soil moisture in the Atlantic Coastal States and the South, and furnished beneficial topsoil moisture elsewhere in the area, but amounts were too light in many sections of a belt extending from Missouri through the Ohio Valley to extreme western Pennsylvania to restore subsoil moisture and replenish critically low water supplies. Precipitation also was frequent in the Pacific Northwest where the winter wheat crop is in good condition. Heavy rains west (Weather continued on page 850).

CEREAL AND FORAGE INSECTS

GREENBUG (Toxoptera graminum) - SOUTH CAROLINA Occurring in most grain fields in Charleston area, but injury slight. (Cuthbert).

Distribution of Meadow Spittlebug

The map on the opposite page shows the known distribution of meadow spittlebug according to State reports and Bureau of Entomology and Plant Quarantine records. In obtaining the data, an inquiry was sent to each State Clearing House. The response has been excellent with 96 percent of the States replying to date. The distribution is based on actual records in so far as possible.

DISTRIBUTION OF MEADOW SPITTLERBUG (*Philagenus leucophthalmus*)
According to State reports received to December, 1953, and BEPQ records



Prepared by
Section of Economic Insect Detection and Reporting

FRUIT INSECTS

Summary of Trapping and Scouting for European Chafer - 1953

Utilizing an experimental trapping method developed by cooperators in the infested areas of New York. 148 traps were set out to detect European chafer (Amphimallon majalis) in the following states: Connecticut (26 traps), Indiana (28), Illinois (12), Massachusetts (6), Michigan (36), Minnesota (12), New Jersey (12), New York-Westchester County- (4), and Wisconsin (12). In several of these states observations by State and Bureau personnel supplemented the trapping activity. In other states no traps were utilized in the scouting program and the survey was based on observations only. In the 148 traps only eight European chafers were caught. All eight were taken in three traps located at the point of the first-known infestation in Connecticut. Although observations were made in the area on several evenings during the period, no chafers were observed in flight, indicating a lighter infestation than in 1952 and demonstrating an effectiveness for the traps that was hardly expected.

Reports covering surveys in the Newark, New York area are not available. (Shockley).

CITRUS BLACKFLY (Aleurocanthus woglumi) - MEXICO - Surveys continued in the Northeast and West Coast areas during period, November 16-30. Only new infestations discovered were at Victoria, Tamaulipas, where 8 properties with 12 infested trees were found. Spraying of these properties commenced immediately. (Mex. Fruit fly and Citrus Blackfly Cont. Proj.).

SOFT SCALE (Coccus hesperidum) - ARIZONA - Moderate to severe infestations in Phoenix nurseries. (Brantlinger).

TRUCK CROP INSECTS

GRANULATE CUTWORM (Feltia subterranea) - SOUTH CAROLINA - Small larvae rather abundant in a field of spinach in Charleston area. (Cuthbert).

APHIDS - VIRGINIA - Many growers in Norfolk area having difficulty controlling cabbage aphid (Brevicoryne brassicae) on broccoli, kale and other winter crucifers. Parasitized aphids adhering to marketable plants especially troublesome. Green peach aphid (Myzus persicae) infesting some plantings of spinach rather heavily. (Brubaker, Greenwood, Hofmaster). FLORIDA - Turnip aphid (Rhopalosiphum pseudobrassicae) has been abundant on all crucifers. Potato aphid (Macrosiphum solanifolii) infesting pepper and egg plant where spraying negligent. (Denmark). SOUTH CAROLINA - Cabbage aphid is fairly abundant on unharvested fall plantings of cole crops in Charleston area. Large numbers of winged forms of turnip aphid in some fields of recently transplanted cabbage. Green peach aphid moderately abundant on spinach. (Cuthbert).

Fall Survey of Aphid Eggs in Maine

A survey was conducted in northeastern Maine, November 2 to 10, 1953 to determine the abundance of fully distended aphid eggs on the more important primary hosts of 3 species of potato-infesting aphids. Buckthorn aphid (Aphis abbreviata) eggs on alder buckthorn (Rhamnus alnifolia) were found at all sampling stations. Overall abundance of the eggs is now only about 75 percent as large as at the same time in 1952 but nearly twice as large as the average for the preceding 10-year period. The decrease in overall abundance in 1953 resulted from unusually large numbers of eggs at one station in 1952. Present egg populations at the other stations range from about the same to twice as many as there were a year ago, and the average for these stations only is 67 percent larger than in the fall of 1952. Present egg populations are large enough to produce potentially serious early-season populations of the buckthorn aphid in 1954.

Aphid eggs on Canada plum (Prunus nigra), a primary host of the green peach aphid (Myzus persicae), are nearly twice as abundant as they were at the same time in 1952, and slightly more abundant than the 10-year average. The percentage of thickets found to be infested also is slightly larger than in the fall of 1952. Green peach aphid was found in most thickets examined in the fall of 1953, whereas this aphid was absent or in very low numbers in most thickets during recent years. It would appear that a much larger than usual percentage of the aphid

eggs now on wild plum were deposited by the green peach aphid. Aphid egg populations on swamp rose (Rosa palustris), the most important primary host of the potato aphid (Macrosiphum solanifolii), are about normal. Compared with the fall of 1952, they are slightly less abundant beside buds, but more than twice as abundant in limb and branch crotches. As in 1952, counts during the fall of 1953 showed that rather a large percentage of the aphid population on swamp rose consisted of the potato aphid. (Shands, Simpson, Wave).

SPOTTED CUCUMBER BEETLE (Diabrotica undecimpunctata howardi) - SOUTH CAROLINA - Causing moderate injury to spinach in Charleston area. (Cuthbert).

TOMATO HORNWORM (Protoparce quinquemaculata) - FLORIDA - Reported abundant in some tomato fields in South Florida. (Wolfenbarger, Dec. 4).

MISCELLANEOUS

A EUROPEAN SNAIL (Rumina decollata) - ARIZONA - Severe infestation found in Phoenix area. (Brantlinger).

STORED PRODUCT INSECTS

STORED-GRAIN INSECTS - ARIZONA - DERMESTIDS and SQUARE-NECKED GRAIN BEETLE (Cathartus quadricollis) numerous in a grain bin at Phoenix. (Bibby).

RECENT IMPORTANT INTERCEPTIONS AT PORTS OF ENTRY

Insects intercepted recently in vegetables in ships' stores from foreign countries included the following pests: at Philadelphia, Acerolepia aspectella (Zell.) in leeks from Belgium, Germany and the Netherlands, (Freedland); Gnorimoschema ocellatella Boyd in beets from Egypt (Freedland); at New York, Apion carduorum Kby. in globe artichokes from France (Shemin, Lineham); and at Savannah, Evergestis forficalis (L.) on cabbage leaves from Belgium. (Fruitt).

ADDITIONAL NOTES

GEORGIA - Very heavy infestation of APHIDS (prob. Toxoptera graminum) on oats in Ben Hill County. Some plants have been killed. (Geiger). Heavy infestation of LUPINE MAGGOT (Hylemya lupini) boring in stems of blue lupine. Stand drastically reduced on 15 acres. (Whitehead, Dec. 4).

Weather Continued: of the Cascades totaled as much as 6 inches for the week, and caused some flooding in the Snohomish, Green and Chehalis Rivers of Washington. In the remainder of the far West and in most of the Great Plains area and extreme upper Mississippi Valley weekly totals were mostly light. From Oklahoma, western Texas, and southern Kansas to the Pacific Coast little or no precipitation occurred; pastures are very dry and stock water is low in parts of Nevada, western Utah, and southeastern and western Arizona. Occasional strong winds caused duststorms in western and northwestern Texas, the eastern plains of New Mexico, and in some parts of Montana.

The week was much warmer than normal in the Atlantic Coastal States, the Mid-west, and in regions near the Canadian Border. In the latter areas unseasonably high temperatures have prevailed for 6 consecutive weeks. In New England, New York, and Montana average temperatures for the past week ranged up to 15° above normal. In contrast the week was several degrees colder than normal in southern regions west of the Mississippi. Freezing temperatures extended far into southern Texas on the 10th and 13th (Del Rio 29° on the 10th, and Laredo 33° on the 13th), slightly damaging some tender vegetables in the lower Rio Grande Valley.

Snow fell in most northern areas west of the Mississippi at the beginning of the period, and drifting snow temporarily blocked some roads in the mountain passes of Colorado. In a belt in eastern Iowa extending from Albia northeastward to the Mississippi River between Dubuque and Davenport snowfall generally exceeded 6 inches, and over 12 inches were reported between Tipton and Maquoketa. On the 14th light to moderate snow fell in the Ohio Valley, and moderate to heavy snow fell over much of New York and northern New England. (Summary Supplied by U. S. Weather Bureau).

SUMMARY OF INSECT CONDITIONS 1953

ARIZONA

Reported by G. D. Butler

Insect conditions in 1953 in Arizona, in general, were characterized by low infestations. This caused some hardship on portions of the insecticide sales and application industry which had been expanding rapidly in the past few years and found the demand for their services greatly decreased this year, particularly in cotton insect control, by the action of predators and parasites.

Cereal and Forage Insects: LESSER CORNSTALK BORER (Elasmopalpus lignosellus) caused considerable injury to beans and hegari in Maricopa and Santa Cruz Counties in August and September. FALL ARMYWORM (Laphygma frugiperda) infestations on corn were reported in early August from Santa Cruz County and eggs and larvae were present in Yuma in corn in early September. Throughout September and October corn and sorghum were infested in the Salt River Valley. By late October infestations had decreased to practically nothing in Yuma. A SPIDER MITE (Paratetranychus pratensis) was abundant on grain sorghum in Yuma and the Salt River Valley in October. CORN LEAF APHID (Rhopalosiphum maidis) was abundant in October in some fields of grain sorghum in Yuma and Maricopa Counties but was attacked by predators and parasites. A WHITEFLY (Aleurocybotus n. sp.) was found on grain sorghum in Maricopa and Pinal Counties in October.

Alfalfa Insects: In early spring CLOVER MITE (Bryobia praetiosa) was more numerous than normal at Yuma. These infestations were followed by TWO-SPOTTED SPIDER MITE (Tetranychus bimaculatus) which was present in some fields into July. In April PEA APHID (Macrosiphum pisi) was quite widespread in the Salt River Valley; mostly light to moderate in severity. The infestations continued into

May at non-economic levels. The EGYPTIAN WEEVIL (Hypera brunneipennis) caused noticeable damage to foliage in March and the early part of April in the Salt River Valley. In Yuma damage was more noticeable in older stands. Lygus spp. began to increase in seed alfalfa in early May in Yuma and were numerous in fields of alfalfa in both Yuma and in Salt River Valley throughout June and July. STINK BUGS of several species were virtually non-existent in alfalfa fields in Yuma until early August. CLOVER SEED CHALCID (Bruchophagus gibbus) infestations in Yuma were rather light in early July but adults became increasingly abundant during the month; so infestations were severe during late July and August. THREE-CORNERED ALFALFA HOPPER (Spissistilus festinus) was abundant in Yuma in late June. Populations in the Salt River Valley in late June were quite high and continued so into July. Adults of ALFALFA CATERPILAR (Colias philodice eurytheme) were observed flying over alfalfa fields in late June in the Salt River Valley, but no injury was reported. Fields in Yuma coming back from the first seed crop were injured in early September and infestations continued into October. A LEAFROLLER (Platynota stultana) again caused severe damage to alfalfa in August and September in Yuma, tying the terminal growth together and feeding.

Fruit Insects: CITRUS THRIPS (Scirtothrips citri) were prevalent in most citrus groves in Yuma in early April and by the middle of the month were numerous in Phoenix. Severe injury occurred to navel oranges not treated in some areas. In October, new growth of grapefruits at Phoenix had a medium infestation. COTTONY-CUSHION SCALE (Icerya purchasi) became abundant particularly on pittosporum in the Salt River Valley in mid-April, and in late April some control was necessary in grapefruit orchards. VEDALIA beetles (Rodolia cardinalis) were distributed to numerous areas in the State but by late May, infestations of the scale caused severe damage to citrus in the Salt River Valley. New infestations were again reported in late August. BLACK-MARGINED APHID (Monellia costalis) was very abundant in Yuma, Graham and Maricopa Counties in September and October. WESTERN GRAPE LEAF SKELETONIZER (Harrisiana brillians) was reported in the Safford area in early July. Several small vineyards in the Phoenix area were defoliated in September after the crop had been harvested. In early May, FALSE CHINCH BUG (Nysius ericae) appeared and caused some damage to grapes in

the Salt River Valley. They also caused some concern in residential areas through the rest of the month in the Phoenix and Tucson areas.

Truck Crop Insects: BEET LEAFHOPPER (Circulifer tenellus) migrations from the desert areas into canteloupe fields of the Salt River Valley commenced in the middle of March. The dispersal of the leafhoppers was still underway in early May, but the desert plants were rapidly drying. At that time, late-planted melons were in a stage susceptible to curly top and were heavily infested with leafhoppers. BEET ARMYWORM (Laphygma exigua), YELLOW-STRIPED ARMYWORM (Prodenia ornithogalli) and CUTWORMS (probably Agrotis ypsilon and Feltia sp.) began to appear in lettuce, sugar beets, broccoli and cabbage in the Salt River Valley in late August and early September. CABBAGE LOOPER (Trichoplusia ni) infestations were rather high on lettuce plants in September and October in the Salt River Valley and Yuma.

Cotton Insects: Thrips were abundant in cotton in Maricopa, Yuma and Pinal Counties in mid and late April and caused considerable damage. Thrips continued to injure cotton in these counties during May and into mid June and in Cochise County into early July. BEET ARMYWORM caused some injury in several areas from early May until early July. WHITEFLIES (Trialeurodes abutilonea) caused some concern in Maricopa, Pinal and Pima Counties in mid-June and early July. Many infestations were controlled by a fungus, particularly in Pinal County. LYGUS BUGS (Lygus spp.) were present throughout July, August and September. Yields were reduced in a few fields due to uncontrolled lygus infestations. STINK BUGS were conspicuous by their absence this season. BOLLWORM populations were treated in some areas but, in general, beneficial insect predators remained high in most areas and held the bollworms in check. COTTON LEAF PERFORATOR (Bucculatrix thurberiella) caused some concern in Yuma, Pinal and Maricopa Counties from mid-August to late September. COTTON APHID (Aphis gossypii) built up in Graham County in late August and through September. SALT-MARSH CATERPILLAR (Estigmene acrea) began to appear in Pinal, Maricopa and Yuma Counties in late September, and in early October they were numerous and defoliating cotton. Aluminum foil barriers were used in several

areas to exclude migrations which were lighter than normal. TWO-SPOTTED SPIDER MITE (Tetranychus bimaculatus) was severe in Safford in late August and through September. There were a few in September in Chochise County. Populations were insignificant in the remainder of the State. Incipient infestations of A LEAFROLLER (Platynota stultana) occurred in late August and early September. Beneficial insects were very active throughout the State all season. Orius populations were heavier than observed in many years and there were also numerous dipterous parasites.

Ornamental Insects: ELM LEAF BEETLE (Galerucella xanthomelaena) began to infest elm trees in the Phoenix area in mid-May and continued into mid-July. By September it was concluded that infestations had been less severe than in the past three years.

Household Insects: HOUSE FLY (Musca domestica) was unusually numerous in Yuma and Tucson in July, but breeding decreased during the dry weather of August and September.

NEVADA

Reported by H. E. Gallaway

GRASSHOPPER infestations are mostly limited and localized. Crop-land species are localized to individual farms except in an areas in Lyon County and the Camnula pellucida infestations along the Humboldt River and adjacent native hay meadows. Rangeland infestations are general throughout the State; however economic numbers are localized, generally confined to burned-over areas. An estimated 18,000 acres of cropland were treated for grasshopper control and approximately 30,000 acres of rangeland grasshoppers were controlled in conjunction with the Mormon cricket control program. MORMON CRICKET (Anabrus simplex) has been on the build-up for the past three years. In order to break this build-up it was necessary to bait approximately 484 thousand acres of rangeland. Excellent control

results were obtained in all areas. Adult surveys disclosed some 25,000 acres of crickets in extreme high altitudes that did not develop in time to come within the scope of the control program. ALFALFA WEEVIL (Hypera postica) infestation were general throughout the northern half of the State. Weather conditions hindered early spring control work. Severe damage developed in individual fields in all the major valleys. LYGUS BUGS infested most alfalfa fields in the State. Alfalfa seed fields required control. General increase in ALFALFA BUTTERFLY infestation. In the southern end of the State (Clark County) many farmers lost one crop. Localized APHID infestation required control. ORCHARD INSECTS - As most orchards and back-yard fruit trees were frozen out this year very little trouble was encountered.

